# WALLOWA-WHITMAN SPECIAL PROJECT SPECIFICATION (2/06)

## T-812F - DUST ABATEMENT

#### 812.01 Description

This work consists of applying dust palliatives on roads shown in the Road Listing.

## 812.02 Materials

The dust palliative materials are shown in the road listing, unless shown as Optional for Purchaser's election. When optional ('OPT') is listed in C(T)5.31# under the product listing, the purchaser shall have the option to place the chemical shown below in B., C., D., or E., or any other chemical approved in writing by the Forest Service. Dust palliative materials shall meet the following requirements:

- A. Water (H<sub>2</sub>O) will be obtained from sources SHOWN ON THE DRAWINGS or listed in the SPECIAL PROJECT SPECIFICATIONS to Section T-891F Water Supply, unless otherwise agreed.
- B. Lignin Sulfonate (LIG S) is the chemical residue produced as a by-product of the acid sulfite pulping process, and supplied as a water solution. The base solution is ammonia, calcium, or sodium and is water soluble to allow field dilution. Provide certification that the material meets the requirements of Subsection 725.20 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects", FP-03.
- C. Magnesium Chloride (MG CL<sub>2</sub>) is the liquid residue of evaporative mineral recovery processes. Provide certification that that the material meets the requirements of Subsection 725.02 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects", FP-03.
- D. Calcium Chloride Brine (CA CL<sub>2</sub>B). Provide certification that the material meets the requirements of Subsection 725.02 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects", FP-03.
- E. Calcium Chloride Flake (CA  $CL_2F$ ). Provide certification that that the material meets the requirements of Subsection 725.02 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects", FP-03.

#### 812.03 Methods

When 'ALL' is shown in C(T)5.31 under the product listing, the purchaser may utilize any method or combination of methods, including water, reducing the number of loads, varying the time of day the loads are hauled, etc., to decrease or eliminate the need for dust abatement.

# 812.04 Equipment

- A. Design, equip, and operate application equipment for spreading dust palliatives so that the material is uniformly applied at the rate and traveled way widths shown in the Road Listing.
- B. Accomplish dilution of dust palliatives within the application vehicle with the water source protected from contamination. Circulate the resulting mixture at least five (5) minutes to ensure uniform mixing prior to application.

#### 812.05 Maintenance Requirements

- A. Application of dust abatement materials or methods shall control dust to prevent excessive loss of road materials and provide for user safety. Limit water applications to abatement for hauling vehicles and provide at a frequency and rate which controls dust such that vehicle tail lights and turn signals remain visible. Vary rates of application as needed but remain low enough to avoid forming rivulets. Accomplish the abatement by sufficient frequency of application without saturating and softening the traveled way. Compacted or glazed road surface or wheel tracks may be loosened as needed for water penetration.
- B. Apply all other dust palliatives at the rates and times agreeable to the Government. The Road Listing shows the expected average application rate and may be varied to meet field conditions. Lignin Sulfonate, Magnesium Chloride, and Calcium Chloride Brine are listed as liters per square meter (or gallons per square yard) of the undiluted product at fifty (50), thirty-three (33), and thirty-eight (38) percent respectively. Calcium Chloride Flake is listed in Kilograms per square meter (or pounds per square yard) at seventyseven (77) percent concentration.

- C. Prior to initial application, when needed, the road will be bladed and shaped under Section T-811F, Blading.
- D. Required subsequent applications may be applied to the existing road surface without blading.
- E. Dust palliatives will not be applied in a manner that spatters or mars adjacent structures or trees, or placed on or across cattle guards or bridges. Discharge dust abatement material only on roads approved by the Government.